ASX ANNOUNCEMENT

11 May 2022

MRG APPLIES FOR 3 NEW RARE EARTH ELEMENT (REE) AND URANIUM EXPLORATION LICENCES IN MOZAMBIQUE

Key Highlights

- **Successful submission of 3 Exploration Licence Applications (ELA's) over a high potential Rare Earth Element (REE) and Uranium (U) project in Mozambique.**

- **The ELA's are situated approximately 780 km North-East of MRG's existing Heavy Mineral Sands (HMS) projects at Corridor Sands (tenements 6620 L and 6621 L) and 230 km North - Northeast of the port city of Beira (refer Figures 1 and 2).**

- **The project will explore a number of both hard-rock and sedimentary REE and U targets associated with primary granitic sources in high-grade metamorphic gneiss within the Mozambique Metamorphic Province and the adjacent sedimentary sequences of the Mozambique Basin sediments.**

- **The project was generated as a result of the following review:**

    - **Radiometric spectrometer data of the regional national airborne geophysical survey which, in conjunction with regional geological maps, shows intense anomalism in both the metamorphic (primary) and sedimentary (secondary) terrains that are formed from them (refer Figures 3 and 4), and**

    - **A 2014 report on historical reconnaissance work done in the target area which highlighted the presence of Monazite in samples (refer Table 1), with Thorium (Th) grades as high as >1,000 ppm Th in a soil and heavy mineral panned concentrate sample and 559 ppm Th in a rock sample from within the ELA's (refer Table 2).**

- **The ELA's are currently under review by the relevant government departments. MRG is ready to commence field exploration as soon as the applications are granted.**

- **Upon grant, these REE and U projects will both grow and diversify the commodity spread of MRG's exploration portfolio in Mozambique.**

MRG Metals Limited ("**MRG**" or "**the Company**") (ASX Code: MRQ) is pleased to announce three (3) new exploration licence applications (**ELAs**) have been made in the Zambezia Province of Mozambique for Rare Earth Elements (**REEs**) and Uranium (**U**).

The new REE and U ELAs are **Patricio** (10999 L; 19,763.06 Ha), **Fotinho** (11000 L; 19,865.18 Ha) and **Adriano** (11002 L; 19,777.14 Ha), which are situated 780 km North-East of the Company's Corridor Central (6620L) and Corridor South (6621L) Heavy Mineral Sands (HMS) licences and 230 km North-Northeast of the port city of Beira (**refer Figures 1 and 2**).

These ELA applications significantly expand on MRG's exploration licence portfolio, while also diversifying the Company's portfolio from HMS projects to include REE and U.

MRG considers the REE and U ELA's as highly prospective for 4 reasons:

1. The airborne radiometric spectrometer data of a regional national airborne geophysical survey shows some very highly anomalous radiometric areas over both hard-rock and recent sedimentary areas. MRG was able to apply for 3 ELA's on some of the highest anomalies covering 59,405.38 Ha of prospecting area in total (**refer Figure 3**).
2. The ELA's include both hard-rock and recent sediments, covering areas of high-grade metamorphic gneisses, undifferentiated granites and granitoid rocks within the Mozambique Metamorphic Province and sediments from the Mozambique Basin sediments (**refer Figure 4**). MRG's exploration will therefore focus on enriched REE's in the sediments sourced from the high-grade metamorphic gneisses, undifferentiated granites and granitoid rocks; as well as exploring within the hard-rock lithologies.
3. A Report supplied to MRG by Dr Luc Antoine on historic reconnaissance exploration that took place in 2014 showing highly anomalous results. The analytical results are from SGS South Africa Pty Ltd, from grab rock, soil and panned Heavy Mineral Concentrate (**HMC**) samples, with only results from within the ELAs shown (**refer Figure 5**). Thorium (**Th**) grades as high as >1,000 ppm Th in a soil and HMC sample and 559 ppm in a rock sample from within the applied for licences (**refer Table 2**) were reported from X-ray fluorescence (**XRF**) analysis, while X-ray diffraction (**XRD**) results showed the clear presence of Monazite in the samples from the REE area (**refer Table 1**).
4. Plotting all the XRF results for REE from panned HMC samples and comparing these results to known data from USA based REE projects, shows the REE content within the Monazite have comparable values (**refer Figure 6**).

MRG Metals Chairman, Mr Andrew Van Der Zwan said: *"The successful submission of the ELA's that cover Rare Earth and Uranium is a very important step for MRG in our forward looking strategy. Whilst we remain committed to moving our HMS projects to development, with 3 significant Mineral Resource Estimates released to date, these new ELA's diversifies our portfolio, providing us exposure to the both the growing Rare Earth and Uranium markets.*

We have an excellent local team involved in the continued development focus of our HMS resources at Corridor and will have spare capacity to expand our exploration program in the highly prospective areas in Mozambique. Mozambique as an investment destination is a fantastic country in which we have already achieved success at our HMS portfolio and we look forward to now expanding that success with these new Rare Earth and Uranium ELAs. We will be ready to commence an exploration program on the new licenses when they are granted.

This evolution of our activities in Mozambique provides multiple opportunities for investors. Firstly, to access a Company that has already identified a significant resource and is currently determining the economic potential via a scoping study. Secondly, MRG is continuing exploration activities within its HMS portfolio which may provide an upgrade to the existing HMS resource (and hence add to the economics). Thirdly, the excitement of new green field exploration targeting highly desired minerals in the Rare Earth and Uranium space."

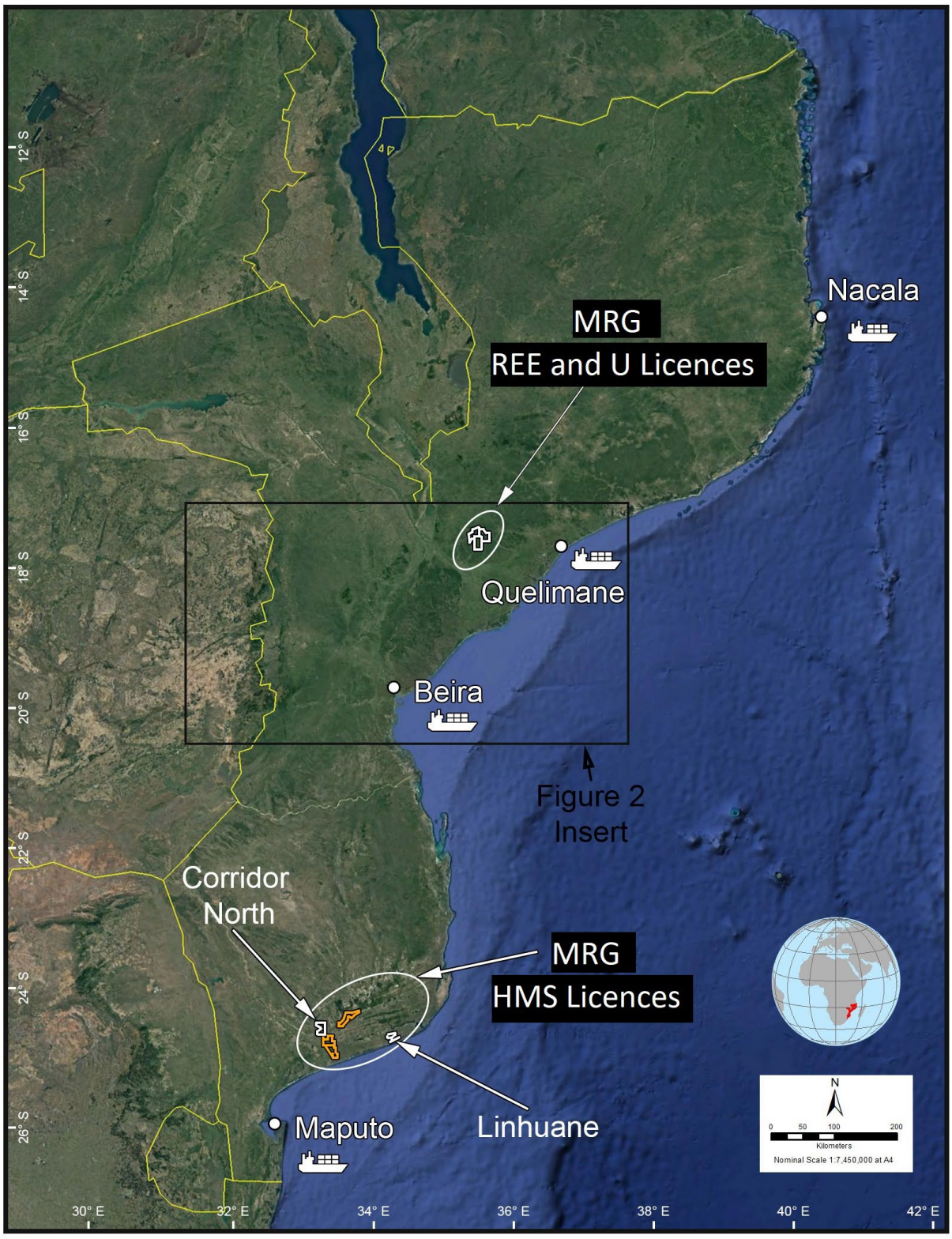

Figure 1: *Map of the location of MRG's new Rare Earth and Uranium (10999 L, 11000 L and 11002 L) Exploration Application Applications (ELA's) in relation to the other MRG exploration licences and the port city of Beira. Gold licences are granted, White licences are under application.*

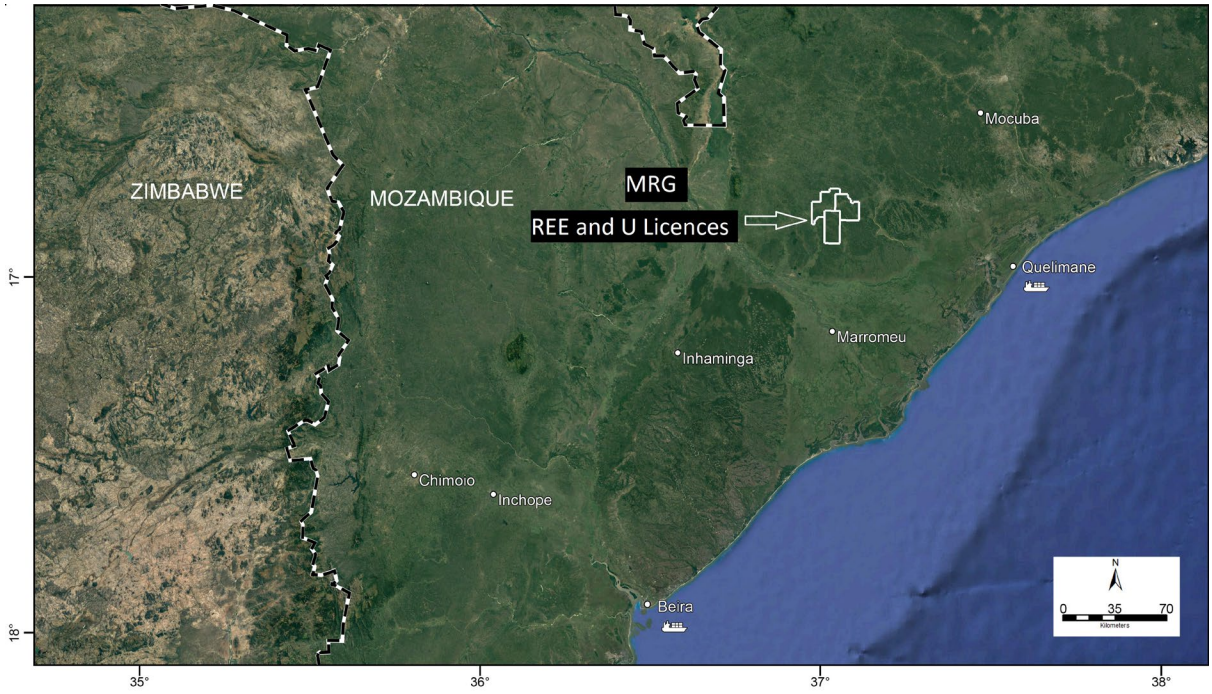

Figure 2: *Map of the location of MRG's Rare Earth and Uranium (10999 L, 11000 L and 11002 L) Exploration Licence Applications (ELA's) in relation to the port city of Beira.*

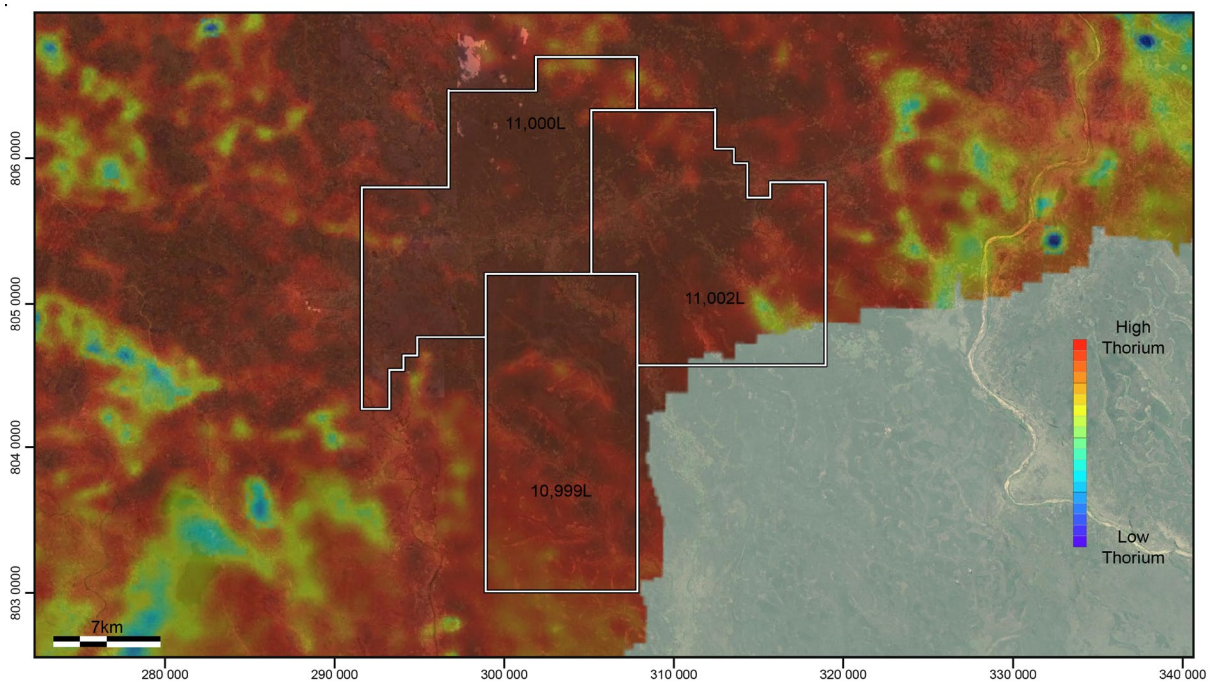

Figure 3: *Map showing the Rare Earth Element and Uranium ELA's plotted on airborne radiometric spectrometer data of a regional national airborne geophysical survey.*

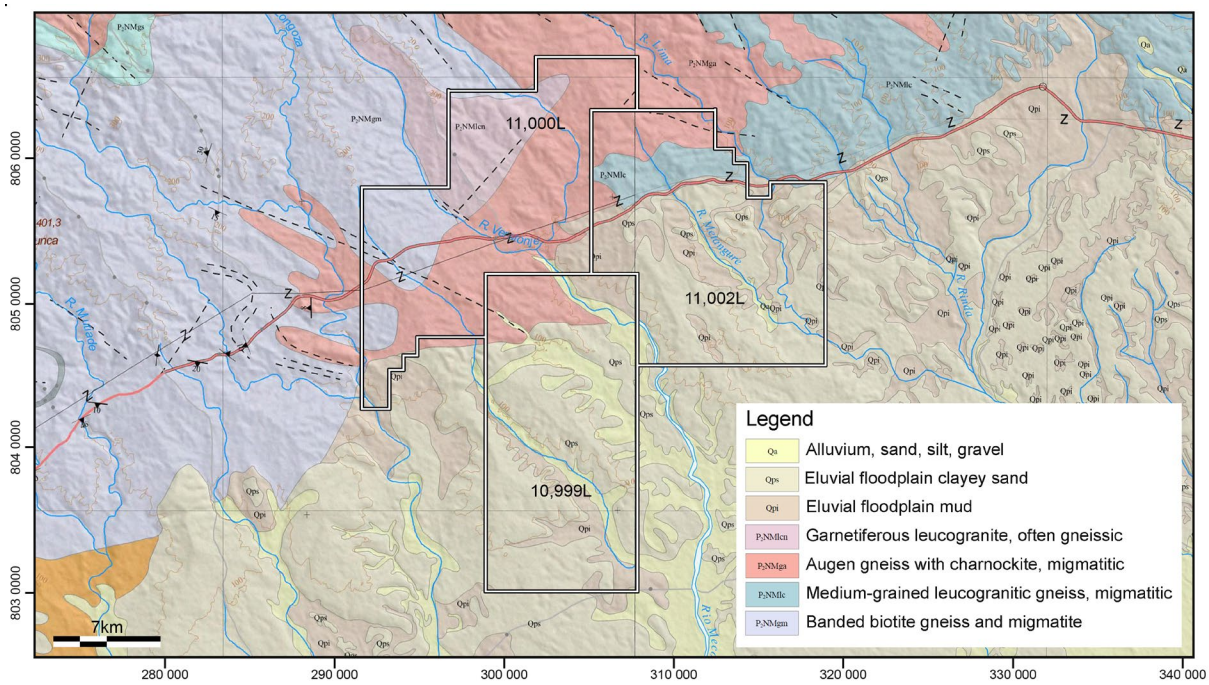

Figure 4: *Map showing the Rare Earth Element and Uranium ELA's plotted on the regional geology map.*

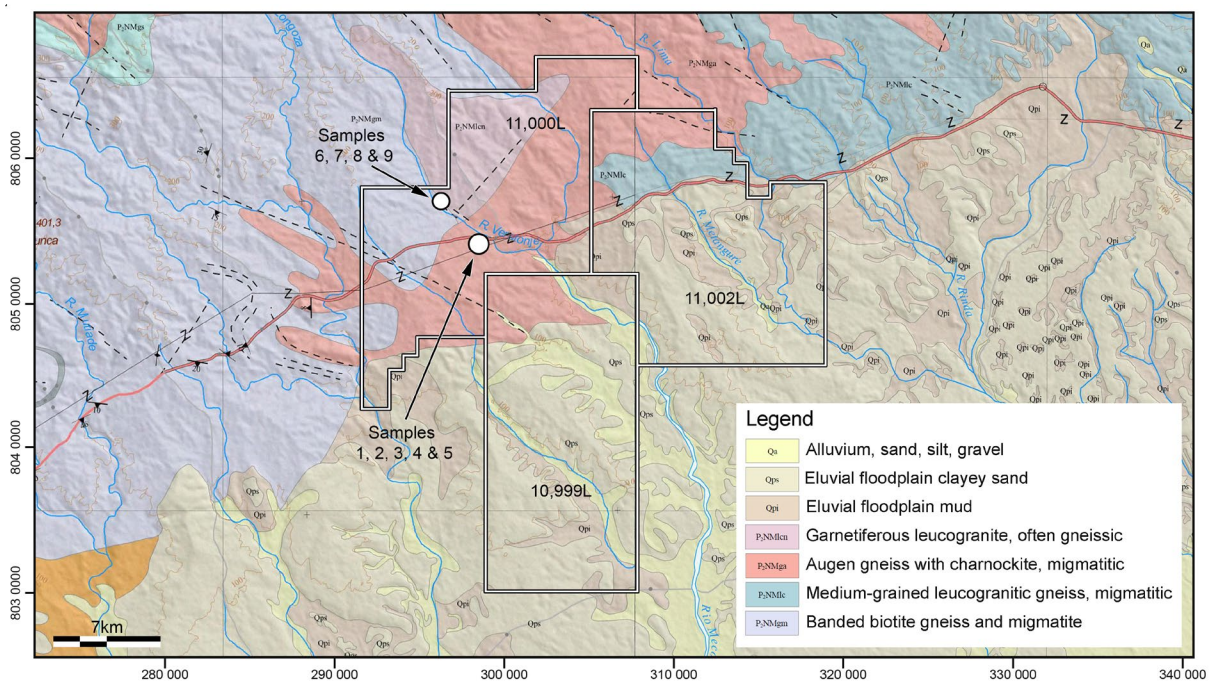

Figure 5: *Map showing the historical sample points within the Rare Earth Element and Uranium ELA's Fotinho (11000 L) plotted on the regional geology map.*

***Table 1**: X-ray fluorescence (XRF) results of historic work done in the ELA's area,*

Rare Earth Elements	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Y	Th	U	Nb
FS4903 Original	13592	1461	4698	590	7.48	342	29.3	63.9	6.48	12.4	1.06	8.9	1.34	147	>1000	171	199
FS4901 Original	9243	984	3139	384	6.13	222	19.6	42.7	4.84	10.7	1.18	8.4	1.46	106	>1000	204	109
FS4906 Original	3805	398	1282	152	3.55	86.5	7.75	18.7	2.36	6.04	0.66	4.7	0.76	55.4	>1000	71.3	51.4
FS4905 Original	2137	235	766	96.9	2.64	58.7	5.21	13.8	1.81	4.27	0.48	3.3	0.52	39.5	701	54.5	26.3
FS4902 Original	1300	139	433	50.5	2.81	28.8	2.71	6.01	0.82	1.9	0.29	1.6	0.32	16.6	306	148	35.3
FS4909 Original	1085	114	362	39.5	2.45	23.1	2.12	4.52	0.62	1.61	0.23	1.5	0.26	14	364	138	25.1
FS4906 Concentrate	35050	3782	11773	1358	17.7	776	65.3	130	13.4	29.8	2.53	22.9	3.21	308	>1000	283	238
FS4909 Concentrate	24499	2615	8001	873	15.7	487	41.1	72.4	7.23	14.9	1.3	12.5	1.87	166	>1000	278	209
FS4905 Concentrate	23371	2581	8092	1022	11.8	615	51.3	111	10.7	19.5	1.38	11.8	1.5	238	>1000	191	124
FS4902 Concentrate	9221	966	3053	352	6.44	198	16.8	31.6	3.11	6.02	0.57	4.3	0.71	69	>1000	97.7	99.7
FS4903 Concentrate	2029	220	713	90.5	2.4	53.8	4.88	11.5	1.42	3.07	0.38	2.3	0.47	30.9	684	81.4	47.8
FS4901 Concentrate	1590	171	546	66.5	2.58	40.2	3.83	9.73	1.44	2.98	0.5	2.7	0.55	27.3	535	108	35.8
FS4907 Rock	1322	140	445	49.2	2.11	27.7	2.5	4.75	0.51	1.15	0.15	0.8	0.14	11.4	559	79.2	24.5
FS4908 Rock	156	17.3	56	9.9	0.71	7.61	1.2	7.09	1.24	4.25	0.6	4.7	0.72	37.3	202	73	29.6
FS4904 Rock	115	12	36.5	4.7	1.3	2.9	0.46	1.5	0.36	0.96	0.19	0.9	0.23	6.2	124	156	8

***Table 2**: X-ray diffraction (XRD) results of historic work done in the ELA's area (Original – Soil samples; Concentrate – panned HMC; Rock – hard rock sample)*

Samples	Quartz	K-feldspar	Plagioclase	Ilmenite	Monazite	Garnet	Zircon	Muscovite	Biotite	Dolomite	Anatase	Chlorite	Clinopyroxene	Kaolinite	Sillimanite
FS4901 Concentrate	50-100	20-50	5-10	1-5	1-5	-	-	-	-	-	-	-	-	-	-
FS4902 Concentrate	50-100	20-50	5-10	1-5	1-5	-	-	-	-	-	-	-	-	-	-
FS4903 Concentrate	50-100	20-50	5-10	1-5	-	-	-	-	-	-	-	-	-	-	-
FS4904 Rock	50-100	-	20-50	-	-	-	-	5-10	-	-	-	-	-	-	-
FS4905 Concentrate	50-100	20-50	10-20	1-5	1-5	5-10	-	-	-	-	-	-	-	-	-
FS4906 Concentrate	20-50	10-20	10-20	5-10	5-10	10-20	1-5	-	-	-	-	-	-	-	-
FS4907 Rock	10-20	50-100	20-50	-	-	-	-	5-10	-	-	-	-	-	-	-
FS4908 Rock	10-20	20-50	20-50	-	-	-	-	10-20	-	-	-	-	-	-	-
FS4909 Concentrate	20-50	20-50	10-20	5-10	1-5	-	1-5	-	-	-	-	-	-	-	-

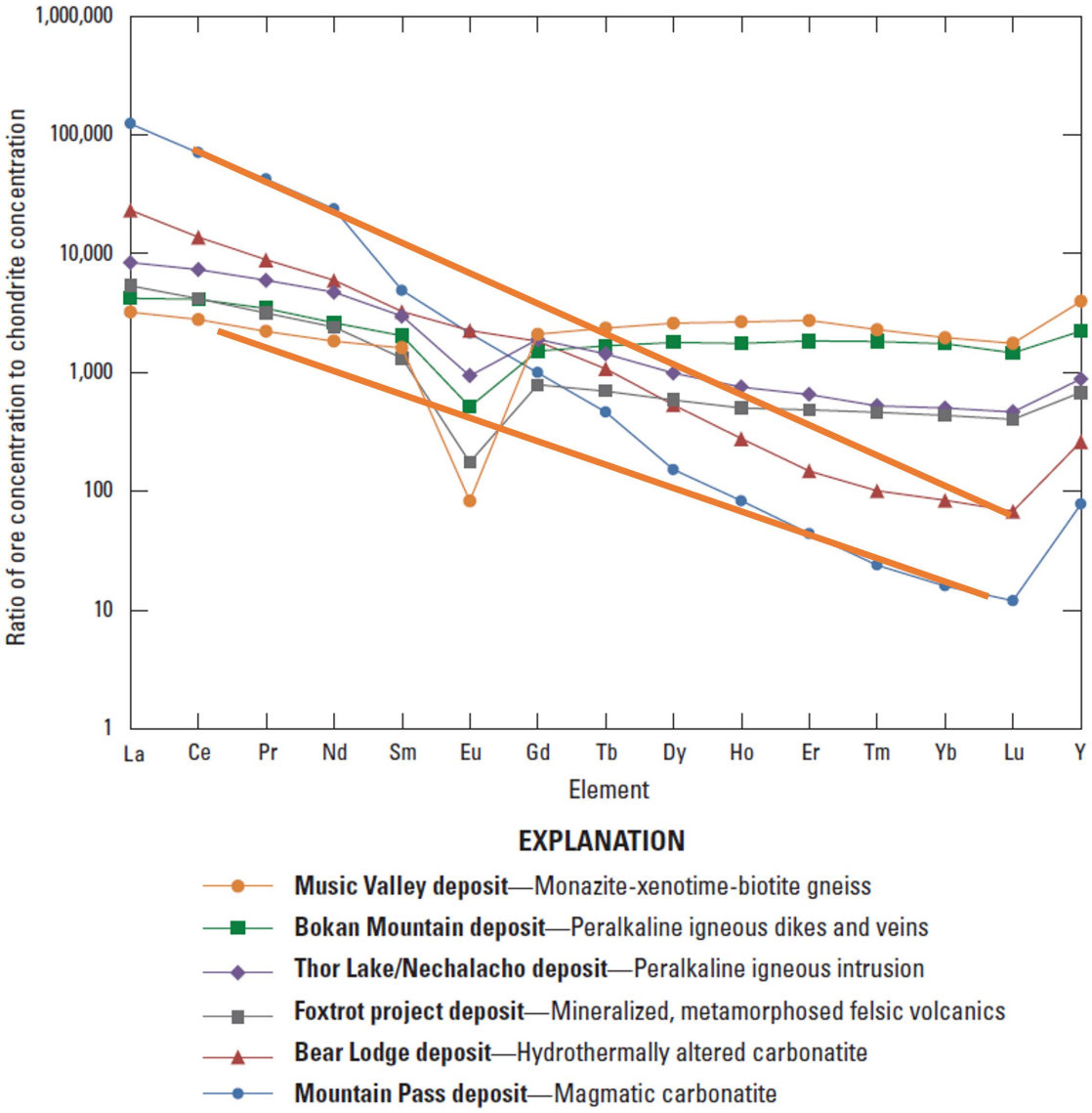

Figure 6: *Graph showing the REE from XRF results of panned HMC (results in range between orange lines) vs known results from USA based REE projects.*

Competent Persons' Statement

The information in this report, as it relates to Mozambique Exploration Results is based on information compiled and/or reviewed by Mr JN Badenhorst, who is a member of the South African Council for Natural Scientific Professions (SACNASP) and the Geological Society of South Africa (GSSA). Mr Badenhorst is a consultant of the Company of the Company and has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which has been undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Badenhorst consents to the inclusion in this report of the matters based on the information in the form and context in which they appear.

-ENDS-

Authorised by the Board of MRG Metals Ltd.

For more Information please contact:

MRG Metals
Andrew Van Der Zwan
Chairman
M: +61 (0) 400 982 987
E: andrew@mrgmetals.com.au

Investor Relations
Victoria Humphries
NWR Communications
M: +61 (0) 431 151 676
E: victoria@nwrcommunications.com.au

JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• Rock and soil samples were collected by the field geologist. • Sample locations are arbitrary - selected in areas of high gamma radiation located using a field scintillometer. • Rock samples were collected from outcrops. • Soil samples were collected from elluvial and alluvial sediments. • Soil samples were split into two: (1) a representative sample of the soil, and (2) a panned concentrate of the heavy mineral portion in the sand fraction. • The samples were sent to the SGS laboratory, Johannesburg, South Africa for geochemical analyses. • All the samples were dried, pulverised, and analysed by ICP-MS for REE, U and Th. • The hard rock samples and the panned soil concentrates were subjected to XRD analysis for mineral identification.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• No drilling was undertaken.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• No drilling was undertaken.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	• No drilling was undertaken.

Criteria	JORC Code explanation	Commentary
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• No drilling was undertaken. • All samples: rock, soil and pan concentrates were sent to the SGS laboratory for sample preparation and analysis.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Analysis (XRF and XRD) done by SGS South Africa (Pty)Ltd, analytical technique seen as appropriate for reconnaissance work with results used for target generation; • No information is available on quality control procedures; results therefore seen as reconnaissance and for target generation.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Not applicable. Field reconnaissance.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• All sample locations were recorded using a handheld Garmin GPS in the UTM 36 WGS 84 South projection. Approximate accuracy is within 5 m.

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Not applicable. Field reconnaissance.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• Not applicable. Field reconnaissance.
Sample security	• *The measures taken to ensure sample security.*	• All the geochemical samples were collected, bagged, sealed, and transported by the field geologist to Johannesburg HQ. The samples were stored at HQ and later delivered to the SGS laboratory by the field geologist.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits were made.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The exploration licences applied for are Patricio (10999 L; 19,763.06 Ha), Fotinho (11000 L; 19,865.18 Ha) and Adriano (11002 L; 19,777.14 Ha), situated in the Zambezia Province of Mozambique.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Report and data were supplied to MRG by Dr Luc Antoine of historic work that took place in 2014, report used in target generation work.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The National regional airborne radiometric spectrometer data emphasise anomalies in Th and U concentrations. The Th

Criteria	JORC Code explanation	Commentary
		anomalies are considered possible proxies for monazite mineralisation discovered in placers on the littoral. Monazite is a phosphate (Th, REE) mineral. The tenements cover both hard rocks, eluvial and alluvial sediments. The local geology is composed, in general terms, of high-grade metamorphic gneisses, undifferentiated granites and granitoid rocks within the Mozambique Metamorphic Province. Mozambique Basin sediments are also partially covered by the tenement. The monazite mineralisation is targeted and may be found in either the hard rock or the sediments. • The project is prospective for the REE hosted in the heavy mineral monazite.

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		• Not applicable. Field reconnaissance.

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Not applicable. Field reconnaissance.

Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Not applicable. Field reconnaissance.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Refer to the figures within the report.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• The reporting refers to field reconnaissance work, data only used for target generation.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• The report provides a suitable overview of the geology and targeted mineralisation, from field reconnaissance work and geochemical sampling.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• The airborne geophysical data, and optical satellite multi-spectral images are to be interpreted before a field mapping programme is planned and initiated.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• Not applicable.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	• Not applicable.

Criteria	JORC Code explanation	Commentary
	• *If no site visits have been undertaken indicate why this is the case.*	
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• Not applicable.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• Not applicable.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• Not applicable.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Not applicable.

Criteria	JORC Code explanation	Commentary
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• Not applicable.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• Not applicable.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• Not applicable.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• Not applicable.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the*	• Not applicable.

Criteria	JORC Code explanation	Commentary
	evaluation process of the different materials.	
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• Not applicable.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• Not applicable.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• Not applicable.

Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* • *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	• Not applicable.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	• Not applicable.

Criteria	JORC Code explanation	Commentary
	• *If no site visits have been undertaken indicate why this is the case.*	
Study status	• *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* • *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	• Not applicable.
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	• Not applicable.
Mining factors or assumptions	• *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* • *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* • *The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.* • *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).* • *The mining dilution factors used.* • *The mining recovery factors used.* • *Any minimum mining widths used.* • *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* • *The infrastructure requirements of the selected mining methods.*	• Not applicable.
Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* • *Whether the metallurgical process is well-tested technology or novel in nature.* • *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* • *Any assumptions or allowances made for deleterious elements.* • *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.*	• Not applicable.

Criteria	JORC Code explanation	Commentary
	• *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	
Environmen-tal	• *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	• Not applicable.
Infrastructure	• *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	• Not applicable.
Costs	• *The derivation of, or assumptions made, regarding projected capital costs in the study.* • *The methodology used to estimate operating costs.* • *Allowances made for the content of deleterious elements.* • *The source of exchange rates used in the study.* • *Derivation of transportation charges.* • *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* • *The allowances made for royalties payable, both Government and private.*	• Not applicable.
Revenue factors	• *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* • *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	• Not applicable.
Market assessment	• *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* • *A customer and competitor analysis along with the identification of likely market windows for the product.* • *Price and volume forecasts and the basis for these forecasts.* • *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	• Not applicable.
Economic	• *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic*	• Not applicable.

Criteria	JORC Code explanation	Commentary
	inputs including estimated inflation, discount rate, etc. • *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	
Social	• *The status of agreements with key stakeholders and matters leading to social licence to operate.*	• Not applicable.
Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* • *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	• Not applicable.
Classification	• *The basis for the classification of the Ore Reserves into varying confidence categories.* • *Whether the result appropriately reflects the Competent Person's view of the deposit.* • *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	• Not applicable.
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	• Not applicable.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *Accuracy and confidence discussions should extend to specific*	• Not applicable.

Criteria	JORC Code explanation	Commentary
	discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. • *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	

Section 5 Estimation and Reporting of Diamonds and Other Gemstones

(Criteria listed in other relevant sections also apply to this section. Additional guidelines are available in the 'Guidelines for the Reporting of Diamond Exploration Results' issued by the Diamond Exploration Best Practices Committee established by the Canadian Institute of Mining, Metallurgy and Petroleum.)

Criteria	JORC Code explanation	Commentary
Indicator minerals	• *Reports of indicator minerals, such as chemically/physically distinctive garnet, ilmenite, chrome spinel and chrome diopside, should be prepared by a suitably qualified laboratory.*	• Not applicable.
Source of diamonds	• *Details of the form, shape, size and colour of the diamonds and the nature of the source of diamonds (primary or secondary) including the rock type and geological environment.*	• Not applicable.
Sample collection	• *Type of sample, whether outcrop, boulders, drill core, reverse circulation drill cuttings, gravel, stream sediment or soil, and purpose (eg large diameter drilling to establish stones per unit of volume or bulk samples to establish stone size distribution).* • *Sample size, distribution and representivity.*	• Not applicable.
Sample treatment	• *Type of facility, treatment rate, and accreditation.* • *Sample size reduction. Bottom screen size, top screen size and re-crush.* • *Processes (dense media separation, grease, X-ray, hand-sorting, etc).* • *Process efficiency, tailings auditing and granulometry.* • *Laboratory used, type of process for micro diamonds and accreditation.*	• Not applicable.
Carat	• *One fifth (0.2) of a gram (often defined as a metric carat or MC).*	• Not applicable.
Sample grade	• *Sample grade in this section of Table 1 is used in the context of carats per units of mass, area or volume.* • *The sample grade above the specified lower cut-off sieve size should be reported as carats per dry metric tonne and/or carats per 100 dry*	• Not applicable.

Criteria	JORC Code explanation	Commentary
	metric tonnes. For alluvial deposits, sample grades quoted in carats per square metre or carats per cubic metre are acceptable if accompanied by a volume to weight basis for calculation. • *In addition to general requirements to assess volume and density there is a need to relate stone frequency (stones per cubic metre or tonne) to stone size (carats per stone) to derive sample grade (carats per tonne).*	
Reporting of Exploration Results	• *Complete set of sieve data using a standard progression of sieve sizes per facies. Bulk sampling results, global sample grade per facies. Spatial structure analysis and grade distribution. Stone size and number distribution. Sample head feed and tailings particle granulometry.* • *Sample density determination.* • *Per cent concentrate and undersize per sample.* • *Sample grade with change in bottom cut-off screen size.* • *Adjustments made to size distribution for sample plant performance and performance on a commercial scale.* • *If appropriate or employed, geostatistical techniques applied to model stone size, distribution or frequency from size distribution of exploration diamond samples.* • *The weight of diamonds may only be omitted from the report when the diamonds are considered too small to be of commercial significance. This lower cut-off size should be stated.*	• Not applicable.
Grade estimation for reporting Mineral Resources and Ore Reserves	• *Description of the sample type and the spatial arrangement of drilling or sampling designed for grade estimation.* • *The sample crush size and its relationship to that achievable in a commercial treatment plant.* • *Total number of diamonds greater than the specified and reported lower cut-off sieve size.* • *Total weight of diamonds greater than the specified and reported lower cut-off sieve size.* • *The sample grade above the specified lower cut-off sieve size.*	• Not applicable.
Value estimation	• *Valuations should not be reported for samples of diamonds processed using total liberation method, which is commonly used for processing exploration samples.* • *To the extent that such information is not deemed commercially sensitive, Public Reports should include:* ○ *diamonds quantities by appropriate screen size per facies or*	• Not applicable.

Criteria	JORC Code explanation	Commentary
	depth. ○ *details of parcel valued.* ○ *number of stones, carats, lower size cut-off per facies or depth.* • *The average $/carat and $/tonne value at the selected bottom cut-off should be reported in US Dollars. The value per carat is of critical importance in demonstrating project value.* • *The basis for the price (eg dealer buying price, dealer selling price, etc).* • *An assessment of diamond breakage.*	
Security and integrity	• *Accredited process audit.* • *Whether samples were sealed after excavation.* • *Valuer location, escort, delivery, cleaning losses, reconciliation with recorded sample carats and number of stones.* • *Core samples washed prior to treatment for micro diamonds.* • *Audit samples treated at alternative facility.* • *Results of tailings checks.* • *Recovery of tracer monitors used in sampling and treatment.* • *Geophysical (logged) density and particle density.* • *Cross validation of sample weights, wet and dry, with hole volume and density, moisture factor.*	• Not applicable.
Classification	• *In addition to general requirements to assess volume and density there is a need to relate stone frequency (stones per cubic metre or tonne) to stone size (carats per stone) to derive grade (carats per tonne). The elements of uncertainty in these estimates should be considered, and classification developed accordingly.*	• Not applicable.